

In re application of HULLENDER et al.
Serial No. 09/528,889

LISTING OF THE CLAIMS:

Please amend the listing of the claims by replacing the Listing of the Claims: section as follows:

-- LISTING OF THE CLAIMS:

1. (previously presented): A method of recognizing chirographs input into a computer system, comprising:

providing a primary recognizer for converting chirographs to shape indexes, the primary recognizer providing output including a shape index when a chirograph is input thereto;

providing a plurality of secondary recognizers to convert chirographs into code points, and associating the secondary recognizers with at least some of the shape indexes;

receiving a chirograph;

providing the chirograph to the primary recognizer and receiving a shape index therefrom, the primary recognizer providing the shape index without making any decision as to whether that chirograph is of a set of easily confused chirographs; and

determining whether one of the secondary recognizers is associated with the shape index, and if so, selecting that secondary recognizer as a selected secondary recognizer and passing the chirograph to the selected secondary recognizer, the secondary recognizer returning a code point.

2. (previously presented): The method of claim 1 wherein the shape index comprises a code point.

In re application of HULLENDER et al.
Serial No. 09/528,889

3. (previously presented): The method of claim 1 wherein at least one of the secondary recognizers comprises a CART tree.

4. (previously presented): The method of claim 1 further comprising training the secondary recognizers by providing a first training set comprising a plurality of chirographs and actual code points for each chirograph.

5. (previously presented): The method of claim 4 wherein training the secondary recognizers further comprises determining a plurality of distinguishing features of chirographs based on predetermined criteria.

6. (previously presented): The method of claim 5 wherein the predetermined criteria correspond to questions, and wherein training the secondary recognizers further comprises determining a question ordering by measuring the quality of each question.

7. (previously presented): A method of recognizing a chirograph input into a computer system, comprising:

receiving a chirograph;
providing the chirograph to a primary recognizer to make a first decision as to a shape index that corresponds to the chirograph; and
without the primary recognizer making a decision as to whether that chirograph is of a set of easily confused chirographs:

selecting a secondary recognizer based on the shape index;

providing the chirograph to the secondary recognizer; and

returning the recognition result from the secondary recognizer.

In re application of HULLENDER et al.
Serial No. 09/528,889

8. (previously presented): The method of claim 7 wherein the shape index comprises a code point.

9. (previously presented): The method of claim 7 wherein the secondary recognizer comprises a CART tree.

10. (previously presented): The method of claim 7 further comprising training the secondary recognizer by providing a first training set comprising a plurality of chirographs and actual code points for each chirograph.

11. (previously presented): The method of claim 10 wherein training the secondary recognizer further comprises determining a plurality of distinguishing features of chirographs based on predetermined criteria.

12. (previously presented): The method of claim 7 wherein the recognition result comprises a code point.

13. (previously presented): A system for recognizing chirographs input into a computing device, comprising:

a primary recognizer configured to determine a shape index from a chirograph;
a plurality of secondary recognizers, each secondary recognizer corresponding to at least one shape index;
an interface configured to receive a chirograph and provide it to the primary recognizer, the primary recognizer providing a shape index corresponding to the

In re application of HULLENDER et al.
Serial No. 09/528,889

chirograph without making any decision as to whether that chirograph is of a set of easily confused chirographs;

 a selection mechanism that selects a selected secondary recognizer based on the shape index; and

 the selected secondary recognizer determining a recognition result from the chirograph and returning the recognition result.

14. (previously presented): The system of claim 13 wherein the shape index comprises a single code point.

15. (previously presented): The system of claim 13 wherein the shape index comprises a single code point that differs from the returned code point.

16. (previously presented): The system of claim 13 wherein the secondary recognizer comprises a CART tree.

17. (previously presented): The system of claim 13 wherein the recognition result comprises a single code point.

18. (previously presented): A computer-readable medium having computer-executable instructions, comprising:

 receiving a chirograph;

 providing the chirograph to a primary recognizer and receiving recognition information therefrom; and

 without the primary recognizer making a decision as to whether that chirograph is of a set of easily confused chirographs;

In re application of HULLENDER et al.
Serial No. 09/528,889

determining whether the recognition information corresponds to a recognized result or has a value indicative of a CART tree being associated therewith; and

if the recognition information corresponds to a recognized result, returning the recognized result, and if the recognition information has the value indicative of the CART tree being associated therewith, providing chirograph information to the CART tree and returning a recognition result therefrom.

19. (previously presented): The method of claim 1 wherein each shape index that the primary recognizer is capable of outputting has a unique secondary recognizer associated therewith.

20. (previously presented): A computer-readable medium having computer executable instructions for performing the method of claim 1.

21. (previously presented): The method of claim 7 wherein the shape index does not correspond to a code point.

22. (previously presented): The method of claim 7 wherein each shape index that the primary recognizer is capable of outputting has a unique secondary recognizer associated therewith.

23. (previously presented): A computer-readable medium having computer executable instructions for performing the method of claim 7.

In re application of HULLENDER et al.
Serial No. 09/528,889

24. (previously presented): The system of claim 13 wherein the shape index does not correspond to a code point.

25. (previously presented): The system of claim 13 wherein the recognition information received from the primary recognizer does not correspond to a code point, and wherein the recognition result comprises a single code point.

26. (previously presented): The method of claim 18 wherein the shape index does not correspond to a code point.

27. (previously presented): The method of claim 26 wherein the recognition result comprises a single code point.
